| | | | | | | | | | | | | | | | immunocytoma |
|----------------------------|-----|-----|-------|------------|--------|-------------|--------|-------|-----------------|-------|--------|------------|------------|----------|--------------|
| | | | | | CLL039 | | CLL057 | | CLL114 | | CLL202 | | CLL209 | | X09249 |
| | А | GAC | | A | GAC | A | GAC | A | GAC | А | GAC | А | GAC | A | GAC |
| ιÚ | [z, | TIC | | (k) | TIC | De, | TIC | Щ | TIC | [zı | TIC | Þη | TIC | ርኳ | TIC |
| ہ | × | TGG | | Z | TGG | Z | TGG | × | \mathbf{I} GG | × | IGG | × | TGG | 3 | TGG |
| | z | AAC | | z | AAC | z | AAC | Ω | GAC | z | AAT | z | AAC | Ω | OAC OAC |
| | | | | ഗ | ICI | ď | ggg | H | TTA | œ | CGC | ഗ | TCC | ഗ | AGC. |
| | | | | ഗ | TCA | ø, | GCA | Ö | GGT | Z | TGG | Д, | ပ္ပင္ပ | 24 | AGG. |
| | | | | | | | | | | တ | | | | | • |
| | | × | TAC | ≥ [| | ۶۱: غانج | IA: | ا (ا⊷ | LAC | Ы | H. | ر م (ا⊷ | EAC SIE | ر ا ا | [F |
| | | | [] | | | | | | - | | | _ | | - | |
| ല | | | AGC | | | | | | - | | • | - | • | - | |
| D6-13 | | | AGC | | | | | | • • | | ••• | | 71 | • | 41 |
| | | | AGC | | | | | | | | | | ••• | | 7, |
| | | | TAT | | | | | | | | | | • • | | •• |
| | | | မ္မမြ | | | | | _ | | _ | • | - | • | - | • |
| | | | | | | | | | | ACC (| • | _ | • | _ | • |
| 0/H | : ៩ | | | | | | | | | TCG 7 | | | | | |
| ກ ສ | AGA | | | | | | | | | AGG 1 | | - | | _ | |
| V _H 4-39 A R | gag | | | | | | | | | gcg 7 | | | | | |
| > ບ | IGI | | | | | | | | | GT (| | | | | |

IG. 1.

FIG. 1 - 2

Set II.

AJ239333 CLL ID 47 AF087422 CLL342 CLL240 Y
Y
TAC
Y
TAC
Y
TAC
Y
Y
TAC
Y
TAC R Y
R Y
R Y
CGC TAC
R Y
AGA TAC
R Y
AGA TAC
R Y
R Y
R Y
CGC TAC
CGC TAC
CGC TAC AT AGA R R R AAA AAG | CCT | ATG D5-5 Y
Y
Y
Y
TAT
W
W
TGG
Y
IAC
F **ი** ნ A R R GCG AGA (ACG AGA (A R R C GCG AGA (A R R C GCG AGA (A GC

SMZL Tierens, A.M. U3 CLL-H2B 1 U0 CLL 3 AJ239371 AJ487492 CLL270 CLL266 **U86787** CLL340 Y
TAC
Y
TAC 7 177 177 177 177 177 177 177 177 TAC H CAC N N AAC N AAC R CGA Y Y TAC E GAG A AGA K AAA E GAA CAA AAA E CAAA E CAAA T T AACG CTT
TTA
A
GCA
L
L
L
L
L
L
R
AGG Greight Greight Greight | Cas CAG TAG
 A
 R

 GCG
 AGA

 GCG
 GTA

 A
 R

 GCG
 AGG

 A
 R

 GCG
 AGA

 A
 R

 GCG
 AGA

 A
 R

 GCG
 AGA

 A
 R

 GCG
 AGA

 A
 R

 A
 R

 GCG
 AGA

 A
 R

 A
 R

 A
 R

 A
 R

 A
 R

 A
 R

 A
 R

 A
 R

 A
 B

 A
 B

 A
 B

 B
 B

 B
 B

 B
 B

 B
 B

 B
 B

 B
 B

 B
 B

 B
 B

AF376953 Digheiro PIQ U2 U84162 BYR (VH1-46) 5 U0 **U84176 KEM (VH1-46) ⁵ U**0 AF376961 LAN Digheiro L01278 CLL-412 3 CLL154 (VH1-18) U86801 4 U3/1 CLL360 N AAC GGG GGG GGG Belgelgelgelgelgelgelgelgelgel TGG N | Cho
 V_H1-03
 D6-19

 C
 A
 R
 D/E

 TGT
 GCG
 GAG
 GAG
 CAG

 C
 A
 R
 E
 Q

 C
 A
 R
 E
 Q

 C
 A
 R
 E
 Q

 C
 A
 R
 E
 Q

 C
 A
 R
 E
 Q

 C
 A
 R
 E
 Q

 TGT
 GCG
 AGG
 GAG
 CAG

 C
 A
 R
 B
 Q

 TGT
 GCG
 AGG
 GAG
 CAG

 C
 A
 R
 G
 Q

 TGT
 GCG
 AGG
 GTC
 CAG

 C
 A
 R
 G
 Q

 TGT
 AGG
 GTT
 CAG

 C
 A
 R
 G
 Q

 C
 A
 R
 CAG

 C
 A</ rer rer rer rer rer rer rer rer rer

FIG. 1 - 7

| IJ |
|----|
| • |
| |
| ب |
| H |

| | | CLL SMI ⁵ | CLL 022 Russia |
|----------------|-----------------------------------|--|------------------------|
| | | CLL068 CLL258 AAC51720 | AJ414008 AF460965 |
| H E | 5 | ATC ATC ATC ATC | ATC ATC |
| D & | ş | GAT D GAT D GAT | GAT O GAT |
| .т. т. | : | TTT TTT TTT TTT | TTT F TTT |
| ¥ ك ك | •)) | GCT GCT | GCT A GCT |
| D 4 | | GAT GAT GAT GAT | GAT D GAT |
| E | ACC | N A A A A A A A A A A A A A A A A A A A | AAT N AAT |
| | Y | TCT CCG | CCG S TCC |
| | CGIR T | CGT CGT | CGT CGT |
| | X TAT | Y Y Y Y Y Y Y Y Y Y | TAT |
| | AGI | AGT AGT | AGT |
| D3-16 | 6 6 6 6 | 0100 0100 0100 0 | 999 |
| Ä | TGE | TIGG TIGG | TGG MEG |
| | $\frac{\vec{\Delta}}{\text{GTT}}$ | GTTT GTTT T ATTT | GTT |
| | Y | TAC TAC TAC | TAC |
| | GAT | GAT GAT D | GAT |
| | TAT | Y TAT Y TAT Y | TAT <u>Y</u> TAT |
| | X TAT | GAT ATT N AAT | , |
| | וט | 667 667 667 667 660 | |
| D/E GA | | 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | |
| A R GCG AGA | | я АСА АСА ВСА ВСА | • |
| GCG | | 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | |
| n Tet | | TGT TGT TGT TGT | 161 161 |

FIG. 1 - 6

AJ389179 GN12 AAC51697 AJ239372 AF376959 ATA GGA N N A H CAC S GTT GTT GTT V V V V V V GTT GTT GTT CGGG GGA CAG GGA CAG GGA CGGG GGA CGGG GGA CGG GGA CGG GGA ATG ATG ATG ATG ATG ATG ATG ATG ATG 7 TGT 7 TGT

Set III.

7/16

sc77u-16 AJ239379 ID28 2 AF174100 AJ389178 CLL175 CLL412 E/D
A GA
Y Y G M D .
TAC TAC GGT ATG GAC G GGA GGT GGT GGT GGT GGT GGT AAC
AAC
AAC
AAC
AAC
AAC
AAC
AAC
AAC D GAT D GAT D GAT D GAT E E GAG GAT D GAT D D GAT D D GAT D D GAT D GAT D GAT D GAT D C A R E
TGT GCG AGA G
AT TAC TAC T
C A R
TGT GCG AGA G

FIG. 1 - 8

Set VIe

Tre 11 012/0-2 JK2 CLL021 Russia U0 ID38 2 C TAC CLL026

Y
C TAC AF099198 Tre 11

Y
C TAC AJ414007 CLL02:
Y
I TAC AJ555263 GÖ14'
I TAC AJ572398 AG 12
Y
I TAC AJ272398 AG 12 $\mathbf{J_{H}4}$ Y F D Y AC TAT GAC TAC Y F
TAC TTT |
H F
TAC TTT |
N F D GAC G GGC Y Y Y TAC P P CCA T P CCA D D GACT S C A R R
C A R R
C A R R
C A R R
C A R R
C A R R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R
C A R

FIG. 1 - 9

9/16

 $V_{H}1 - 02$ D6-19 J_H4 C A R D/E F ת Y TGT GCG AGA GA AC TTT GAC TAC GG GTA TAG CAG TGG CTG GTA C L E Η Y F D TGT GCG AGG GAG CAG TGG CTG GTA CTT GAG CAC TAC TTT GAC TAC CLL011 R V Q W L G L R Н F D ¥ TGT GCG AGA GTG CAG TGG CTG GGC TTA AGA --- CAC TTT GAC TAC CLL270 CARE Q W L G Α E N F D Y TGT GCG AGA GAG CAG TGG CTG GGC GCA GAA --- AAC TTT GAC TAC CLL266 CARE Q W V L K N F D Y TGT GCG AGG GAG CAG TGG CTG GTA CTG AAA --- AAC TTT GAC TAC CARV Q L L Τ. F: R F D Y TGT GCG AGA GTT CAG TGG TTA TTA CTC GAA --- CGA TTT GAC TAC AJ239371 CLL 3 2 C A r n Q W G L D - Y F D Y TGT GCG AGA AAC CAG TGG CTG GGT CTC GAC --- TAC TTT GAC TAC AJ487492 SMZL Tierens, A.M. C A R E W V R T - S F L D Y TGT GCG AGA GAG CAG TGG CTG GTA AGG ACG --- AGC TTT GAC TAC **U86787** CLL-H2B 1 U0 CAR E V L S - Y F D Y TGT GCG AGG GAG CAG TGG CTG GTC CTA TCT --- TAC TTT GAC TAC CLL336 C A R E L V Q - N Y P D Y TGT GCG AGG GAG CAG TGG CTG GTA CTT --- AAC TAC TTT GAC TAC CLL360 C A R E W Α ьк P F D Y TGT GCG AGA GAG CAG TGG CTG GCC TTA AAA --- CCC TTT GAC TAC AF376961 LAN Digheiro CARK I V N Y F D Q W L Α Y TGT GCG AGA AAG CAG TGG CTG GCC ATC GTC AAC TAC TTT GAC TAC L01278 CLL-412 3 C A R E W G Q L P TFD Y TGT GCG AGA GAG CAG TGG CTG GGT CTA CCT --- ACC TTT GAC TAC U86801 4 U3/1 C A R v W Q L G L T G P N D Y TGT GCT AGG GTT CAG TGG CTG GGC CTG ACG GGG CCG AAT GAC TAC U84176 KEM (VH1-46) 5 U0 C A R G Q W L V T T. N F D Y TGT GCG AGG GGA CAG TGG CTG GTC ATC CTA --- AAC TTT GAC TAC U84162 BYR (VH1-46) 5 U0 CARD Q W P \mathbf{T} N N F D Y TGT GCG AGA GAT CAG TGG CTG CCC ACG --- AAC AAC TTT GAC TAC AF376953 Digheiro PIQ U2 CARE W S Q V L L H F D Y TGT GCG AGG GAG CAG TGG TTG GTA CTA TCT --- CAC TTT GAC TAC CLL154 (VH1-18) C A R Q Q W L G G D Y F D Y TGT GCG AGG CAG CAG TGG CTG GGT GGC GAC TAC TTT GAC TAC CLL026 A R R Q W L A L G F D H Y TGT GCG AGA AGG CAG TGG CTG GCC CTA GGC CAC TTT GAC TAC AF099198 Tre 11 012/0-2 JK2 С V Y Y F D TGT GCG AGA CAG CAA TGG TTC GGC GTG TAC TAC TTT GAC TAC AJ414007 CLL021 Russia U0 С R Q L P Y F D Y TGT GCG AGA CAG CAG TGG CTG GTA CTT CCA TAC TTT GAC TAC AJ239373 ID38 2 A R Е 1 v т H F D Y TGT GCG AGA GAG CAG TGG CTC ATA GTA ACT CAC TTT GAC TAC AJ555263 GO14 C A R Q W v L L D Y F D Y TGT GCG AGA CAG CAG TGG CTG GTG TTG GAC TAC TTT GAC TAC AJ272398 AG 12 C A R E Q v L S N F D Y Not available HOW 13 PH1562

10/16 FIG. 2

| 4. | CDRI | CDR2 | |
|-----------|---|---|--|
| Germiine | QVQLVQSGAEVKEPGSSVKVSCKASGGTPSSVAIEWVROAPGOGLEWWGGTTI | DTECTANVA OVPOCUUMATINA DVC | CDR3 FTSTAYNELSSLRSEDTAVYYCARD YYDYVWGSYRY DAFDVUGQGTMVIVSS |
| MCLL068 | ************************************** | LIEGITATINGKE ÜĞKVITINDK | FISTAINELSSLEBEDTAVYYCARD YYDYYWGSYRY DAFDYNGQGTHVIVSS |
| MCLL258 | ********* | • | |
| MF9 | | • • • • • • • • • • • • • • • • • • • | ggDsnsqgDsn |
| SHI | | | |
| CLL022 | | | |
| RIE | | | |
| | | | |
| Consensus | QVQLVQSQAEVKRPGSSVKVSCKASGGTPSSYAISWVRQAPGQGLEWMGGIIF | PIFGTANYAORFOGRYTTTADES | TSTAYMELSELRSEDIAVYYCARGGDYDYVWGSYRXNDAFDINGQGTMVTVSS |
| | | | TO THE BURGEDIA TICARGEDIDI VWGS YRINDAFDI WGQGINVTVSS |
| SetVIII | CDR1 | | |
| Cormline | OMETIOGO STEVENSOR | CDR2 | CDR3 |
| F841 | AAAMAAQUDAKKAABAKAACKARGGILRAANIEMAKGADAGGGTEMWGGIIb | Pifgtanyaokfogrvtitadks | CDR3 TSTAYMBLSSLRSEDTAVYYCARD DIVVVPAAI YYYYYGNDVWGQGTTVTV88 |
| UCA4 | | | |
| | | | |
| G013 | | | |
| Consensus | QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVROAPGOGLEWMGGITP | TECTANYLORECCEUTTTANEC | TSTAYMELSSLRSEDTAVYYCARGGDIVVVPAAMX-YYYYGMDVNGQGTTVTVSS |
| | | TI GILLINGW KOWALLININGS | Talmindessursedtaviicarggdivvvpaamk-yyyygmdvhgqgttvtvss |

Amino acid alignments of the H chain variable regions of all sequences in each Set

| | The state of the s | W MON III IN ESTALMIELLES LINSED PAVI Y CAR | GGDI VVVPAAMX - YYYYGMDVNGOGTTUTU: |
|-----------|--|---|---|
| set V | CDR1 CDR2 | | |
| Germline | QVQLVQ6GAEVKKPGSSVKV8CKASGGTPSSYAISWVRQAPGQGLEWMGGIIPIFGTANYAQ | | CDR3 |
| | E.ELTE GETTAL GROAN SCHARGELE SEINT PARK FOR PGGGLEWNGGI I PIFGTANTAQ | KPQGRVTITADKSTSTAYMELSSLRSEDTAVYYCAR | DMVRGVTT VVVVVQMTVVVQQQqqqqqqqqq |
| CLL561 | ******************************** | 27 | |
| MJ21 | | ····· | AM.QQTYYEK |
| RF22 | | | |
| | | | |
| GN1.2 | *************************************** | ****************************** | G <u>X</u> <u>X</u> |
| FUH | | | GO |
| | _ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | . . | |
| ID64 | *************************************** | ····· | 5QNVL |
| SIN | | · · · · · · · · · · · E. · · · · · · · · | A RLD Y X |
| | ************************* | | |
| Consensus | QVQLVQSGAEVKKPGSSVKV8CKASGGTPSSYA1SWVRQAPGQGLEWMGGI1PIFGTANYAQI | | vXL |
| | | AFQGKVTITAUSSTSTAYMELSSLRSEDTAVVVCAR | XW// BCS/TTTVVVV VVVDCCC ROCT COMMUNICO |

| Set .]] | CDR1 CDR2 | |
|-----------|--|--|
| Germline | QVQLQQWGAGLLRPSETLSLTCAVYGGSFSGYYWSWI RODPGFGT FWI CFTNURCETTURG | CDR3 CDR3 CDR3 CDR3 |
| CLL183 | . D | SECSAVIISVDISKIGESEKESSVIRADTAVIYCARG VDTAMV YYYIYGHDVWGQGTTVTVSS |
| CLL240 | N P | TITLE TO THE TENED OF T |
| CLL342 | | |
| | | |
| | | E |
| | | |
| Consensus | Q 4 OLL Q W G A G L L R P SET L S L T CA V Y G E S G Y Y H S W I R Q P P G E G L E H I G E I N E S G T N Y N P S | LASSTVISVDISANQFSLALSSVIAADTAVYYCARGYGDIPMARRYYYYGMDVWGQGTIVTVSS |
| | | |

| | Ser ATG | CDR1 CDR2 | om no | |
|---|-----------|--|--|--|
| | Germline | QVQLVQSGAEVKRPGASVKVSCKASGYTFTGYYMHWVRQAPGQGLEWMGWINPNSGGTNYAQEPQGRVTMTRDTSISTAYMEL | CDR3 | |
| | CLL011 | TO THE PROPERTY OF THE PROPERT | SRLRSDDTAVYYCARDQWLV YFDYWGQGTLVTVSS | |
| | CLL266 | *************************************** | LEH | |
| | | | E CINENT | |
| | | | 11 41 mm | |
| | CLL340 | *************************************** | | |
| | СЫЗ | *************************************** | | |
| | '81v18 | | | |
| | CLL-H2B | ······································ | ************************************** | |
| | | *********************************** | | |
| • | Consensus | QVQLVQSGAEVKKPGASVEVSCKASGYTFTGTYMHWVRQAPGQGLEWNGWINPNGGJTNYAQKFQGRVTMTRDTSISTAYMEL | CDI DCDDDATTOO DOOR OF THE TOTAL OF THE TOTA | |
| | | - APPENDIX MAN ANALYSIS TATALIAN | DEPT STATEMENT OF THE S | |
| | Bet "VTh | CDD1 | | |
| | | | | |

| Per ATT | | CDR2 | |
|-----------|---|--|--|
| Germline | QVQLVQSGAEVKKPGASVEVSCKASGYTPTSYAMU | vvrqapgqrlewngwihagngntkybqefqgrvtitrdtsastaym | CDR3 |
| CLL336 | Total Control of the | ······································ | ELSELRSEDMAVYYCARDQWLV YFDYWGQGTLVTVSS |
| CLL360 | *************************************** | | •••••••••••• ELS |
| LAN | | | |
| CLL-412 | | | |
| POR | | ************************** | P STINI |
| PIO | *************************************** | ********** | D OT W IN |
| | | | |
| consensus | QVQLVQSGAEVKKPGA5VKVSCEASGITFTSYAMHW | vrqapgqrlewmgwinagngntxybqxfqgrvtitrdtsastaym | FI.SSI.REPOTAVVVCARROWI.ALM. VEDVMOCOMI IMPIGO |
| | | | |

| Set VIC Germline CLL154 | CDR1 CDR2 QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYGISHVRQAPGQGLEWMGWISAYNGNTNYAQRLQGRVTMTTDTST B | CDR3 STAYMELRSLRSDDTAVYYCARDQNLY YFDYWGQGTLYTVSSGLSH |
|-------------------------------|--|--|
| KEH | CDR1 CDR2 QVQLVQSGAEVKKPGASVEVSCKASGYTFTSYYMHVVRQAPGQGLEWMGIINPSGGSTSYAQKPQGRVTMTRDTST QVQLVQSGAEVKKPGASVEVSCKASGYTPTSYYMHVVRQAPGQGLEWMGIINPSGGSTSYAQXPQGRVTMTRDTST | ····IIN- |

| et VIe | | _CDR1 | CDR2 | empa. | |
|------------------|---------------------------------------|-----------------------|-------------------------|---|----------|
| eraline LL026 | evolvosgaevkkpgeslriscegsgysf | TSYNISWVRONPGKGLEWMGR | DPSDSYTHY SPEROGRAM CAN | CDR3 KSISTAYLOWSSLRAEDTAMYYCARQQWLV | |
| B | | | | S | |
| | · · · · · · · · · · · · · · · · · · · | U | Y.GD.R | G/MPA | |
| 14 | •••••• | ***************** | | LP | <u>.</u> |
| | | | | | |
| | | | | LD LSI KSISTAYLQWSSLKASDTAMYYCARQQWLVLX | |

11/16 FIG. 3

12/16 FIG. 4

| | V_{K} A27 J_{K} 1/4*/5 $^{\#}$ | dag cag tat ggt ago toa cot co | WIFG | g tgg aog ttc ggc | CLL068 | | Childs | ··· ··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· · | | | SMI | | CLL022 (natural Ab producing clone) | | a-cardiolipin | | | |
|-------------------|------------------------------------|--------------------------------|---|-------------------|--------|-------------|-----------------------|---|------|--------|---------------------------------------|----------|---------------------------------------|----------|---------------|---|----------------------|--|
| i | LH3 | e gat get ttt gat ate | | | NT C1 | | | : | • | : | • | : | | : | • | : | . 22 | |
| | DAFDI | ga | | | • | : | • | : | • | : | • | : | • | : | • | : | 71 | |
| | Fz. | i i | | | • | : | • | : | • | : | ٠ | : | | : | ٠ | : | | |
| | ď | <u> </u> | | | • | | • | : | • | : | • | : | ٠ | : | • | : | 13 | |
| | A | p g | , | | • | | • | | • : | : | • | : | • | : | • | : | 18 | |
| | | | BGG | Z | 3 | 2 | | 2 | ; | Z | 5 1 | : 2 | ā ' | : 2 | 4 ' | ė | 11 | |
| 1 | | × | t tat | U | 3 4 | ρ | ı ğ | , U | ıö | , c | 3 5 | <u>,</u> | 4 8 | <u>י</u> | J & | ; | 14 15 16 17 18 19 20 | |
| 1 | | P | t 69 | | • : | • | • | • | • | • | • | | • | | • : | : | 15 | |
| 1 | | × | ta | • | • : | • | : | • | | • | • | | • | | • | | 7 | |
| | | Ω | B B | • | • : | | : | • | : | • | • | • | • | • | • : | | 13 | |
| D3-12 | D H | O | 18 98 | • | • | • | : | • | : | • | : | • | | • | • : | | 12 | |
| č | 3 | . ≥≤ | ابد | • | • | • | : | • | : | • | : | • | • : | • | : | | 7 | |
| | | حز | 9 | • | : | • | : | ٠ | : | Н | 45 | • | : | Н | بيرا | | 9 10 | |
| l | | ~ | t t | • | : | ٠ | : | ٠ | : | • | : | ٠ | : | • | : | | | |
| | | ~ | 出 | | : | • | : | • | : | • | : | • | : | • | : | | ω. | |
| | | YYDYVWGSYR | tat tat gat tac git tgg ggg agt tat cgt | | • | | ند ند | ٠. | | ٠. | : | | : | - | : | | | |
| | 田 | ٠. | 6 | Ω | 6 26 | H U U | 표 : 1월 : | D D | O 66 | z U | gc a | r D | 6.6 | z | g D | | n. | |
| | A & | | | じり | 201 | (D | 5 55 | ש | 888 | r O | 94.9 | r O | 99.9 | ບ ບ | £ SE | | | |
| 6 | 5 | | 1 | • | : | | : | | : | • | : | ٠, | : | · | ; | | · m | |
| $V_{\rm H}I - 69$ | 4 | | | | : | | : | • | : | | : | | : | • | : | | N | |
| $V_{\rm H}$ | C A R D/E tgt gcg aga ga | | | • | : | • | 99 99t at 609 99t at. | • | | • | * * * * * * * * * * * * * * * * * * * | • | * * * * * * * * * * * * * * * * * * * | • | NT CT | | ٦. | |
| | | | | | | | | | | | | | | | | | | |

13/16 FIG. 5

| V _K L6 Q Q R S N W P P Cag cag cgt agc aac tgg cct cc F T F G P G | a tte act tte gge cet ggg | • • • • • • • • • • • • • • • • • • • | |
|--|---------------------------|---------------------------------------|------------------------------|
| | FS41 UCA4 | G013 | - |
| V V V L at tac tac tac | GG MS GA MG | G.G M.R | 9 10 11 12 13 14 15 16 17 18 |
| 1 7 | ងៈ ង | M R R .9. | 1.5 |
| E D I V V V P A A I ag gat att gta gta gta gta gta gta gta g | Z Z | Z : | 14 |
| D I V V V P A A | | • ; | 13 |
| 4 8 | • : • | • : | 12 |
| Z A 8 | • : • | • | 11 |
| D2-2 V V | • : • | • : | 70 |
| | • • • | • : | Ø |
| ₽ | • : • | • : | œ |
| Hä | • : • | • : | 7 |
| ВB | • : • | • : | w |
| E sg | 6 G .93 990 6 A | ro ģ | In |
| D & | ធ ្ល ធ | ය කෙනු | 4 |
| ^오 ᅜᅼᇷ | • ; • | • : | m |
| V _B L-69 CARD/E tgt gcg aga ga | • : • | • : | 64 |
| ± Ω ‡ | • : • | • : | н |

14/16 FIG. 6

| * | , | | , | . 5 | ggc | | | | | | . 1 | | | : | | | | | | |
|---------------------|-------------|----------------|---------------|------------|---------------------------------|--------|---|------|--------|------|-----|-------------------|-----|--------|---|------|-----|-----|-----|----|
| .T. 1/2 * | | | | ت ند | ttc g | | | | | | • | • ' | • | • | | | | | | 17 |
| |) | | | | gtg t | | | | | • | • | . ' : <u>-</u> | • | • | | | | | | 10 |
| | _ | | | > × | tgg gt | | | | | | • | <u> </u> | 1 | ; ! | | | | | | 6 |
| | ρ. | | 20 266 | × | 7 | | | | | ρ | i | ; I | ì | • | | | | | | æ |
| | מ צ ג |) i | 44 y | | | | | | | • | • | : • | 1 | : | | | | | | 7 |
| | Z | | Ži Š | | | | | | | • | , | • | , | : | | | | | | 9 |
| | | 1 6 | Fi D | | | | | | | • | | • | ' ; | : | | | | | | ın |
| | | | n B | | | | | | | • | | • | | | | | | | | 41 |
| 16 | 0 | 1 6 | n D | | | | | | | • | | • | : | | | | | | | m |
| V,1-16 | ָ ר | 1 6 |)))) | | | | | | | • | : | • | : | | | | | | | 6 |
| 5 | B | | n | | ı | | | | | • | : | • | : | • | | | | | | ન |
| | | | | | | CLL561 | | MJ21 | | RF22 | | GN12 | | FUH | | ID64 | | SIN | | |
| $J_{\rm H}6$ | ⊳i | tag | | | | • | : | | : | • | : | • | : | ٠ | : | • | : | • | : | 75 |
| دا | Ы | tac | | | | • | : | • | : | • | : | • | : | • | : | • | : | • | : | 14 |
| | Þ | at tac tac tac | | | | • | : | • | : | • | : | | : | П | g; | А | | | : | 13 |
| | | a t | | | g | H | | Þ | : ن | Þ | ند | Н | ند | > | gtc | Н | ttg | H | ctg | 12 |
| | | | ۲ | 1 | ata | Q | c caa | H | i, | H | ä | ש | 33. | z | ac. | 耳 | cac | വ | tgc | 11 |
| | | | ۲ | 1 | arr. | • | : | • | : | • | : | • | : | • | : | • | : | • | : | 10 |
| | | | Þ | • ; | 티 | • | : | • | : | • | : | • | : | • | : | • | : | • | : | თ |
| 0 | | | U |) | 93ga | • | : | • | : | • | : | • | : | • | : | • | : | • | : | 80 |
| D3-10 | | | V R G V | ; | 8 | Q | ų | • | : | • | : | Q | œ | Q | ď | • | : | • | : | 7 |
| Α | | | > | . † | 띪 | • | : | • | : | • | : | • | : | • | : | | : | • | : | Ψp |
| | 田 | | × | | arg | • | : | • | : | • | : | . • | : | | : | • | : | • | : | ın |
| | a | ga | ۲ | 1 | 3 | Ø | : | ď | : | ט | 6 | ש | ė | Ø | ::::::::::::::::::::::::::::::::::::::: | ď | : | > | نِه | 4 |
| 6 | ø | ಷಿದ್ರಡ | Н | 1 | art act atg gtt cgg gga gtt ata | • | : | • | 5 | • | : | 闰 | gag | • | 5 | • | pi. | • | : | ო |
| V _H 1-69 | A R D/E | gcg aga ga | | ŧ | 3 | • | ::::::::::::::::::::::::::::::::::::::: | • | 5 | • | : | • | : | • | 6 ···· | • | : | • | : | 14 |
| $V_{\rm H}$ | ט | tgt | | | | • | : | • | : | • | : | • | : | • | : | | : | • | : | H |

15/16 FIG. 7

| * | | | ש | 88 | • | : | • | : | ٠ | : | | | | | 12 |
|-----------------|-----------|-----------------|------|-------------------|------------|---|----------|-----------------|---------|---------------------------------------|---------------|---|-------------|---------|----------|
| $J_{\rm K}1/2*$ | | | [z, | tto | • | *: | • | *: | • | : | | | | | 11 |
| اجر | | | H | acg | • | | • | *: | • | : | | | | | 9 |
| | | | WTF | g tgg acg ttc ggc | | * | • | * | • | : | | | | | თ |
| | Д | ខ្ល | | 5 | • | : | ı | 1 | • | : | | | | | ∞ |
| | ρı | gat | | | • | *** *** 0 | • | i a a | | | | | | | 1 |
| | × | tgg | | | | : | | : | | : | | | | | ω |
| | 田 | Sac | | | | : | • | <i>ب</i> د : | • | : | | | | | ĸ |
| | F | caa ggt aca cac | | | | : | • | : | | : | | | | | 4 |
| | てり | gt (| | | | : | • | φ. | | : | | | | | m |
| 117 | OX | aa c | | | • | : | • | : | | : | | | | | C1 |
| V_k A17 | MQGTH | atg | | | | : | | : | | : | | | | | н |
| | | | | | CLL183 | | CLL240 | | CLL342 | | CLL 4B | | ID47 | | |
| ပ | ١. | Ö | | 1 | | به | | : | | : | ٠ | : | | : | 15 |
| $J_{\rm H}$ 6 | į≻i L. | ac ti | | | • | :.t | | : | • | : | • | : | Ī | : | |
| | X X X | ac t | | | ٠ | | <u>م</u> | G | ρ; Α | aga , | ~ | . 56 | ~ | go | 13 14 |
| | рн | at tac tac tac | | | ρ 4 | ·ga a | 兄兄 | cgg c | X H | at at | 자 모 | 99 | 14 | | 12 1 |
| | | w | | gtt ac | H Ki | a | | t | | G | | ņ | DVIKR | g ag | 11 |
| | | | > - | atg g | | . CC a | E4 | tr | 다 • | : | > | : | _ | æ | 10 1 |
| | | | DTAM | t at | Ħ | 3. | > | ti : | | : | • | : | > | | 9 |
| D5-5 | | | 4 | gtg gat aca gct | ρį | | ρι | t | ρι | | ρι | υ : | Н | dca. | ω |
| Ã | | | H | t ac | • | : | • | : | • | : | • | ::::::::::::::::::::::::::::::::::::::: | • | : | _ |
| | | | А | 65 | • | : | • | : | • | ; 51 | _ | | _• | : | |
| | | | Þ | g | გ გ | 9. | 4 | tat .c. | r O | D. | ρı | ğ | <u>С</u> 4 | g | 6 |
| | | | | | × | a tac | Ħ | | Z | c tgg | M | a ta | Œ | c tt | រោ |
| | R G | a 99 | | | • | œ · · · · · · · · · · · · · · · · · · · | • | 8 | • | · · · · · · · · · · · · · · · · · · · | ø | ca tac cc. | • | ttc | 4 |
| 7 4-34 | ద | gcg aga | | | • | : | • | : | • | : | • | : | • | : | m |
| 4 | Ø | 900 | | | • | : | • | : | ٠ | : | • | : | • | : | 74 |
| , m | 7.1 | 끍 | | - 1 | _ | • | | | _ | ٠ | - 1 | ٠ | | • | +1 |

16/16 FIG. 8

| V _H | 1- | 02 | | | Ī | 6-: | 19 | ··· | | | | | | J _H 4 | | VK | 01 | 2/0 | 2 | | | | | | | J | _K 1/ | 2* |
|----------------|------------|--------|------------------|--------------|-------|-------------|---------|----------|-------------|---------------------|--------|------------|--------------|------------------|---------|---------|--------|-------|-------|-------|------------|---------|-----|-------|-----|--------|-----------------|-----|
| C | A | R | D | /E | : | | | | | | Y | F | D | Y | | Q | Q | S | Y | S | T | P | P | | | | | |
| tgt | | | a ga | | | | | | | a | c tac | ttt | ga | c ta | a | | | | | | acc | | | | | | | |
| | | ŢV | * | Q | W | L | . V | • | | | | | | | | | | | | | | | | | W | T | F | G |
| | _9 | g gt | a ta | g oa | g t | g ot | ggt | a o | | | | | | | _ | | | | | | | | | g | | acg | | _ |
| • | • | • | • | • | | | | | | н | | • | | • | CLL011 | • | | • . | | | | • | | | | | • | • |
| ••• | • • | • •• | | | • • • | | · · | | cc ga | ıga. | | • - • | • • | | | . • • • | ••• | • • • | | | • • • • | • • • | | | | | ••• | ••• |
| • | • | | • · • | • • •• | · · | • | | e e | 20.00 | | - a | • | • | | CLL266 | • | • | • | • | ٠ | • | • | • | - | | • | • | • |
| | | | V | | | | G | Ι | R | _ | H | | • | | CLL270 | | • • • | ••• | • • • | ••• | • • • | • • • • | ••• | | .a. | ••• | • • • • | ••• |
| | | | | | | | 9 | c ti | a ag | - _Г а | - c | ٠ | | | | • | • • | • | • | • | • | • | • | | • | • | • . | • |
| • | | • | | | | | | L | K | | И | | | | CLL340 | | | | | | • | • | | | | • | • | • |
| • • • | •• | • • • | g | • •• | | • •• | • •- | t | g aa | a | - a | | | | • | | | | | | | | | | | | | |
| | | | | | | | | | | | R | | • | • | CLL3 | | | | | | | | | | | | | |
| • • • | | | | | | | | | | | - cga | • • • | | | | _ | | | | | | | | | | | | |
| • | | | | | | | | | _ | | • | • | • | ٠ | slv18 | (mar | giı | ıaI | Z | one | ⊇ 1 | ymp | ho. | ma) |) | | | |
| - | | | | | | • | | | | - g | | • | | • • • • | | | | | | | | | | | | | | |
| | | | | | | | | | | | · ag. | | • | • | CLL-H2 | B | | | | | | | | | | | | |
| | | | | | | | | | | _ | | | | • | | _ | _ | _ | | | S | | | _ | | | | |
| • • • | ٠ | ٠.٠ | ٠ | | | | | .t | a to | t | • ••• | | | ٠ | <u></u> | | • | • | • | • | .g. | | · | | • | • • | • · • • | • |
| • | | | • | • | • | | | L | _ | N | • | _ | | | CLL360 | • | • | | | | | | | _ | | | | |
| ••• | | | | | | | | | | | | • • • | · - - | • • • | | | | | • • • | | | | | | | | | |
| • | | | | | | | | | | - | | • | • | • | LAN | | | | | | | | | | | | | |
| • • • | • • • | ••• | K | ••• | • • • | • • • • | ca | e et. | a aa: 77 | N | cc. | | | | | _ | | | | | | | | | | | | |
| • | • • • • | • | a | • | • | • · | | at: | v agte | . A | · | • | | • | CLL-41: | 2 . | • | • | • | • | • | • | • | _ | • | • . | • . | • |
| • | | | | | | | P | T | _ | N | N | | | | PIO | | •• | ••• | • • • | • • • | ••• | | | | | • • • | | ••• |
| • • • | | | ٠ | | •• | | ccc | ac | , - | · a., | a | | | | | | | | | | | | | | | | | |
| • | • | ٠ | • | • | | • | • | L | S | - | H | | | | CLL154 | | | | | | | | | _ | | | | |
| • • • | • • • | ••• | | ••• | • • • | t | | . ta | tct | : - | a., | • • • | | | | | •• | •• | | | | | | | | | | |
| | | | | | | | | | | | N | | •. | | BYR | | | | | | | | | | | | | |
| ••• | • • • | ••• | .ga 77 | ••• | • • • | • • • | ٠و ت | ato T | r cta | · | a P | NT | | • • • | | | | | | | | | | | | | | |
| • | • • t | • g | .tt | • | • | • | | . to | . Acc | | cog | aa - TA | • | • | KEM | | | | | | | | | | | | | |
| • | • | • | | | • | • | Ğ | G | | D | • | | | | CLL026 | | | | | | | | | | | | | |
| | | ··g | | | | | .gt | gge | | g., | | | | | | | | | | | | | | | | | | |
| | • | | R | • | | | A | L | _ | G | H | | | _ | TRE | | | | | | | | • | - | | | • | |
| • • • • | •• | • • • | ag. | ••• | • • • | <i>:-</i> · | .cc | .ta | | gg. | с | | | • • • | | | | | • • | • • • | | | | | | | | |
| • | • | • | • | • | • | F | G | V | - | Y | • | • | • | • | CLL021 | | | | | | | | | | | | | |
| • • • • | •• | ••• | ••• | a | ••• | t.c | .ga | gtg T | | t - | ••• | | • • • | ••• | | | | | | | | | | | | | | |
| | | | | | | | | | | | • | • | • | • | ID38 | | | | | | | | | | | | | |
| • | | | E | | | - | J | V | Т | | H | - | • | • • • | GO14 | | | | | | | | | | D | | | |
| · | •• | ••• | g | - | | c | а | gta | act | | c | • • • • | • | • | GOT4 | • • | | • | • | • | • | • | • | , | R. | • | • | • |
| | | | | | | | | | | | | | | | AG | • | • | • | ' | | • | • | | | -39 | | ••• | ••• |
| | • • | • • • | | | | | | | | | | | | | - | | | | | | | | | | | | | |
| • • | | | | | | • | | | | - | • | • | • | • | HOW | | | | | | | | | | | | | |
| _ | | | | | | | | | ilab | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | . 7 | 8 | 9 | 10 | 11 | 12 1 | .3 3 | 4 | 15 | | 1 2 | 3 | 4 | 5 | | 5 7 | 8 | 9 | 10 | 11 | . 1 | 2 1 | .3 |